

Application No.: 09/976,019

Docket No. D02363

AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

1. (presently amended) A terminal for optimizing audio equipment for the reproduction of an audio signal that has source characteristic data and that is transmitted through a delivery channel, comprising:

a receiver that receives the audio signal and the source characteristic data;

a memory that stores the source characteristic data and delivery channel capability data; and

a processor that generates optimized configuration data for reproducing the audio signal based on the source characteristic data, ~~and the delivery channel capability data~~ and audio equipment data; and

a control interface that couples the terminal with the audio equipment, wherein the processor generates the optimized configuration data based on the audio equipment data, and wherein the optimized configuration data is transmitted through the control interface to the audio equipment so as to automatically, without any user input, configure the audio equipment based on the optimized configuration data.

2. (original) The terminal of claim 1, wherein the memory comprises: a channel map for generating a program guide based on the source characteristic data and the delivery channel capability data.

3. (original) The terminal of claim 1, wherein the memory contains delivery channel capability data for at least two delivery channels.

Application No.: 09/976,019

Docket No. D02363

4. (original) The terminal of claim 1, wherein the memory comprises: a program guide database that stores the source characteristic data; and a channel map database that stores the delivery channel capability data.

5. (original) The terminal of claim 4, wherein the terminal generates an assembled program guide based on the data in the program guide database and the channel map database.

6. (original) The terminal of claim 4, wherein the program guide database stores the source characteristic data in at least one source characteristic data field.

7. (original) The terminal of claim 6, wherein the audio signal is transmitted over one of at least two delivery channels, and wherein the program guide database has at least one source characteristic field assigned to each delivery channel.

8. (original) The terminal of claim 4, wherein the channel map database stores the delivery channel capability data in at least one delivery channel capability data field.

9. (original) The terminal of claim 8, wherein the audio signal is transmitted over one of at least two delivery channels, and wherein the channel map database has at least one delivery channel capability data field assigned to each delivery channel.

10. (original) The terminal of claim 1, wherein the optimized configuration data generated by the processor includes data that provides an alternative configuration if the delivery channel cannot support the source characteristic of the audio signal.

Application No.: 09/976,019

Docket No. D02363

11. (original) The terminal of claim 1, wherein the memory stores the audio equipment ~~configuration~~ data that is used by the processor to generate the optimized configuration data.

12. (original) The terminal of claim 1, further comprising an output interface that couples the processor to an output mechanism to present the optimized configuration data to a user.

13. (presently canceled) The terminal of claim 1, further comprising a control interface that couples the terminal with audio equipment.

14. (presently canceled) The terminal of claim 13, wherein the control interface is one selected from the group of a hard wired connection, a wireless link, or a integrally formed connection with the terminal.

15. (presently amended) The terminal of claim 1 ~~13~~, wherein the audio equipment data ~~from the audio equipment~~ is transmitted from the audio equipment through the control interface to the terminal ~~and wherein the processor generates the optimized configuration data based on the audio equipment data~~.

16. (presently canceled) The terminal of claim 15, wherein the optimized configuration data is transmitted through the control interface to the audio equipment to configure the audio equipment based on the optimized configuration data.

17. (presently canceled) The terminal of claim 13, wherein the optimized configuration data is

Application No.: 09/976,019

Docket No. D02363

transmitted through the control interface to the audio equipment to configure the audio equipment based on the optimized configuration data.

18. (presently canceled) A terminal for optimizing reproduction of an audio signal that has source characteristic data and that is transmitted through a delivery channel, comprising: a receiver that receives the audio signal, the source characteristic data, and delivery channel capability data; and a processor that generates optimized configuration data for reproducing the audio signal based on the source characteristic data and the delivery channel capability data.

19. (previously withdrawn from consideration) The terminal of claim 18, wherein the source characteristic data and the delivery channel capability data are received via at least one data field associated with the delivery channel.

20. (previously withdrawn from consideration) The terminal of claim 19, wherein said at least one data field is added to a Program and System Information Protocol.

21. (previously withdrawn from consideration) The terminal of claim 19, wherein said at least one data field is added to an Event Information Table associated with the delivery channel.

22. (previously withdrawn from consideration) The terminal of claim 21, wherein at least one of at least two delivery channels capable of sending the audio signal to the terminal has the Event Information Table.

Application No.: 09/976,019

Docket No. D02363

23. (previously withdrawn from consideration) The terminal of claim 22, wherein a given Event Information Table is associated with one of said at least two delivery channels.

24. (previously withdrawn from consideration) The terminal of claim 22, wherein the processor generates a program guide from the Event Information Table associated with said at least two delivery channels.

25. (previously withdrawn from consideration) The terminal of claim 18, wherein the optimized configuration data generated by the processor includes data that provides an alternative configuration if the delivery channel cannot support the source characteristic of the audio signal.

26. (previously withdrawn from consideration) The terminal of claim 19, wherein said at least one data field is included in a recording medium containing audio data for generating the audio signal.

27. (previously withdrawn from consideration) The terminal of claim 18, wherein the delivery channel is at least one selected from the group consisting of a television broadcast, radio broadcast, satellite delivery channel, wireless delivery channel, DSL delivery channel, Internet delivery channel, and cable delivery channel.

28. (previously withdrawn from consideration) The terminal of claim 19, wherein said at least one data field is at least one metadata field.

Application No.: 09/976,019

Docket No. D02363

29. (previously withdrawn from consideration) The terminal of claim 18, further comprising a control interface that couples the terminal with audio equipment.

30. (previously withdrawn from consideration) The terminal of claim 29, wherein the control interface is one selected from the group of a hard wired connection, a wireless link, or an integrally formed connection with the terminal.

31. (previously withdrawn from consideration) The terminal of claim 30, wherein audio equipment data from the audio equipment is transmitted through the control interface to the terminal and wherein the processor generates the optimized configuration data based on the audio equipment data.

32. (previously withdrawn from consideration) The terminal of claim 31, wherein the control interface transmits the optimized configuration data is transmitted through the control interface to the audio equipment to configure the audio equipment based on the optimized configuration data.

33. (previously withdrawn from consideration) The terminal of claim 31, wherein optimized configuration data is transmitted through the control interface to the audio equipment to configure the audio equipment based on the optimized configuration data.

34. (previously withdrawn from consideration) The terminal of claim 18, wherein the receiver further receives a partial program guide generated from a program guide database and a channel map database outside of the terminal.

Application No.: 09/976,019

Docket No. D02363

35. (previously withdrawn from consideration) The terminal of claim 34, wherein the terminal generates an assembled program guide based on the data in the program guide database and the channel map database.

36. (previously withdrawn from consideration) A system for optimizing reproduction of an audio signal that has source characteristic data and that is transmitted through at least one of a plurality of delivery channels, comprising: a receiver that receives the audio signal and the source characteristic data; a channel map database that contains delivery channel capability data for at least one each of said plurality of delivery channels; a program guide database that stores the source characteristic data; a control interface that couples the terminal with audio equipment to allow audio equipment data to be transmitted to the terminal; and a processor that generates optimized configuration data for reproducing the audio signal based on the source characteristic data, the delivery channel capability data, and the audio equipment data.

37. (previously withdrawn from consideration) The system of claim 36, wherein the receiver, program guide database and the channel map database and processor are disposed in a terminal.

38. (previously withdrawn from consideration) The system of claim 36, wherein the program guide database and the channel map database are disposed in a memory that is in a head- end portion of the system.

39. (previously withdrawn from consideration) The system of claim 36, wherein the optimized configuration data generated by the processor includes automatic configuration information that is transmitted to the audio equipment via the control interface.

Application No.: 09/976,019

Docket No. D02363

40. (previously withdrawn from consideration) The system of claim 36, wherein the memory further comprises a channel map that generates a program guide based on the data in the program guide database and the channel map database.

41. (previously withdrawn from consideration) The system of claim 36, wherein the optimized configuration data generated by the processor includes data that provides an alternative configuration if the delivery channel cannot support the source characteristic of the audio signal.

42. (previously withdrawn from consideration) The system of claim 36, further comprising an output interface that couples the processor to an output mechanism for outputting the optimized configuration data to a user.

43. (previously withdrawn from consideration) The system of claim 36, wherein the control interface is one selected from the group of a hard wired connection, a wireless link, or a integrally formed connection with the terminal.

44. (presently amended) A method for optimizing audio equipment for audio reproduction, comprising the acts of:

obtaining an audio signal having source characteristic data;

obtaining delivery channel capability data; and

generating optimized configuration data based on the source characteristic data, audio equipment data, and the delivery channel characteristic data;

generating optimized configuration data based on the audio equipment data; and

Application No.: 09/976,019

Docket No. D02363

automatically configuring the audio equipment, without any user input, based on the optimized configuration data.

45. (original) The method of claim 44, further comprising the act of storing the source characteristic data in a program guide database.

46. (original) The method of claim 44, further comprising the act of storing the delivery channel capability data in a channel map.

47. (original) The method of claim 46, wherein the channel map stores delivery channel capabilities for a plurality of delivery channels.

48. (previously withdrawn from consideration) The method of claim 44, wherein at least one of the source characteristic data and the delivery channel capability data is transmitted in an Event Information Table.

49. (previously withdrawn from consideration) The method of claim 48, further comprising the act of compiling said at least one of the source characteristic data and the delivery channel capability data from the event information tables corresponding to at least two delivery channels to generate a program guide database.

50. (original) The method of claim 44, wherein the act of generating the optimized configuration data includes the act of generating data that provides an alternative configuration if the delivery channel cannot support the source characteristic of the audio signal.

Application No.: 09/976,019

Docket No. D02363

51. (presently amended) The method of claim 44, ~~wherein the further comprising the act of obtaining audio equipment data, wherein the generating act generates the optimized configuration data based on the~~ is obtained from the audio equipment data.

52. (original) The method of claim 51, wherein the act of generating the optimized configuration data includes the act of generating data that provides an alternative configuration if at least one of the delivery channel and the audio equipment cannot support the source characteristic of the audio signal.

53. (presently canceled) The method of claim 51, further comprising the act of configuring the audio equipment based on the optimized configuration data.

54. (original) The method of claim 51, further comprising the act of outputting the optimized configuration data.

55. (original) The method of claim 44, further comprising the act of outputting the optimized configuration data.

56. (new) The method of claim 44, wherein the audio data is retrieved from a memory.